March 15, 1961

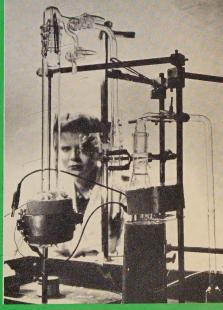
Investor's Reader

For a better understanding of business news



WESTINGHOUSE

PHYSICISTS IN INDUSTRY STUDY PURE METALS (see page 16) NC.





EMERALD WHISKY

Faith, it's St Paddy's Day this week and the gay colleen lifts her mug of Irish coffee to togst the day. According to the Whisky Distillers of Ireland this brew tastes best when carefully concocted. It is made by mixing one jigger of Irish whisky in a mug of hot & strong black coffee. Add sugar to taste and stir well. Top with lightly whipped cream. Important: do not stir after adding cream. The unique flavor of Irish coffee comes from sipping the hot coffee and Irish whisky through the cool cream.

This particular mugful is mixed with Gilbey's Crock o' Gold which Hartford distiller Heublein Inc began to import two years ago. Best selling Irish whiskies (which, the Distillers take pains and paid ads to stress, are also tasty with mixes other than coffee as well as straight) are Old Bushmills, handled by Quality Importers Inc. and John Jameson. brought in by Hiram Walker, These two brands account for an esti-

mated 70% of US consumption. The rest, besides Crock o' Gold, includes Power's (Canada Dry), Murphy's and Paddy (both Austin, Nichols), Original Irish (American Distilling) and Tullamore Dew (Munson G Shaw).

A century ago Irish whisky outsold Scotch 25-to-1 in the US market. In fact the Irish whisky distillers who still use the old fashioned "pot stilling" (drop by drop) method claim they taught the Scotchmen how to make Scotch. But the modern, lighter Scotch fast outpaced other imports and today's Irish whisky imports (an estimated 65,000 cases last year) are but a wee drop compared to 7.000,000 cases of Scotch.

In the last two years, however, imports of Irish whisky (also lighter now) have gained 60%. Big boost has come from the Irish Export Board's series of clever off-beat ads appearing mostly in the urbane New Yorker and the Reporter, Prepared by San Francisco agency Weiner & Gossage, the campaign has been so successful the Export Board has OKayed a three-page ad for the St Patrick's Day issue of Time.

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No 6, Vol 36

March 15, 1961

Stock Splits Begin to Accelerate

Rate Dropped in 1960 But More are Proposed As Market Prices Climb

W/ITH Stock Exchange volume so far this year averaging an unprecedented 4,500,000 shares daily, the Dow-Jones industrials up 17% from last Fall's low and many broader-based yardsticks like the Standard & Poor's and Merrill Lynch indices at new alltime highs, Wall Streeters and stockholders throughout the land find occasion for a favorite pastime-watching the stock splits tick by or, better yet, trying to anticipate the splits to come. The buoyant market has carried many individual stocks to high price levels which make them logical split candidates. A strictly unofficial list of some popular nominees is found on page 4.

Just in the first two months of this year, 28 companies listed on the NYSE have split or announced intentions of doing so—including some like American Natural Gas, Corn Products and Heinz which were announced last year but will be effected in 1961. This compares with 63 in all of 1960 and the record 94 of 1959. A tabulation of companies on the split calendar since last September is given on pages 2 & 3. In addition to the Big Boarders, it includes most Amex and a substantial sampling of over-the-counter splitters.

However, the generally lower-priced Amex issues are fissioning at a much slower rate. Only Kawecki Chemical, Seton Leather and Technical Materiel have proposed splits in 1961. Last year 15 Amex-traded companies split, down from the record 33 in 1959. All told, statisticians Standard & Poor's calculate 238 splits were approved last year, down from the high of 320 in 1959 but well above the 1958 recession-hurt total of 63.

The table includes only splits of

2-for-1 or better or stock dividends of at least 100%—which are of course identical to splits except for some accounting and legal technicalities. But as usual there was also an abundance of smaller splits and stock dividends. For example Har-

ris-Intertype split 3-for-2 last September, Richardson-Merrell 4-for-3 in November. On April 25, stockholders of IBM and McCall will both meet to approve 3-for-2 fissions.

Many companies also augment cash payments with small stock di-

SOME RECENT STOCK SPLITS . . .

COMPANY	SPLIT	DATE	LISTED	MAIN BUSINESS
Acadia-Atl Sugar Refs	3-1	Apr 27	Montreal Big Board Big Board Big Board Over-Counter Big Board	From Maritimes to Prairies
AMP Inc	3-1	Vote Apr 27		Elec terminals, connectors
Amalgamated Sugar	3-1	Feb 14		No 4 beet sug producer
American Distilling	2-1	Sept 20		35% blends, 31% bourbon
American Greetings	2-1	Sept 10		Cards & gift wrappings
American Machine & Fdry	2-1	Vote Apr 18		Bowling & diversity
American Natural Gas	2 ½-1	Vote Apr 26	Big Board	Distributor in Mich, Wis
American Photocopy Equip	3-1	Vote Apr 11	Big Board	Office copying equip
American Ship Bldg	5-1	Nov 2	Big Board	Grt Lakes ship blder
Atlas Powder	4-1	Vote Apr 25	Big Board	Heavy chems, explosives
Automatic Retailers of Am	2-1	Jan 17	Over-Counter	Vending mach operator
Bastian-Blessing	4-1	Vote Apr 7	Midwest	Soda fountain equip
Beech Aircraft	3-1	Nov 23	Big Board	Light planes
Boots Pure Drug	2-1	Dec 15	Over-Counter	British drug chain
Bowmar Instrument	2-1	Jan 10	Over-Counter	Aircraft & missile equip
Brach (EJ) & Sons	6-1	Dec 12	Midwest	Candy
Brunswick Corp	2-1	Dec 22	Big Board Over-Counter Over-Counter Over-Counter Big Board	Bowling, school equip
C-E-I-R Inc	2-1	Prop Feb 16		Data analysis
Central Louisiana Elec	2-1	Oct 12		Serves 30 parishes
Christiana Securities	80-1	Vote Mar 10		Owns 27% of duPont stk
Chock Full O'Nuts	4-1	Dec 1		Coffee mfr, NY snackshops
Commercial Credit Commercial Trust of NJ Connecticut General Life Corn Products Dayton Power & Light	$2-1$ $2\frac{1}{2}-1$ $2-1$ $2-1$ $2-1$ $3-1$	Vote Mar 30 Feb 1 Mar 31 Vote Apr 25 Vote Apr 13	Big Board Over-Counter Over-Counter Big Board Big Board	Instalment loans No 3 in Jersey City \$2 billion assets Mazola, other foods, oils Ohio utility
Dun & Bradstreet Dynacolor Corp Federated Dept Stores First Nat Bank of Jersey City Florida Nat Bank	2-1 3-1 2-1 2 ¹ / ₂ -1 2-1	Dec 15 Oct 5 Sept 30 Jan 24 Sept 13	Over-Counter Over-Counter Big Board Over-Counter Over-Counter	Credit reporters Kodachrome film proc No 1 chain No 1 in Jersey City No 2 in Jacksonville
Gerber Products Great Lakes Paper Haveg Industries Hawaiian Telephone Heinz (HJ)	2-1	Vote Apr 14	Big Board	No 1 in baby foods
	3-1	Vote Apr	Toronto	Newsprint & pulp for US
	2½-1	Vote Apr 26	Big Board	Reinforced plastics
	2-1	Vote Mar 22	Honolulu	All parts of 50th State
	3-1	Feb 20	Big Board	More than 57 varieties
Hewlett-Packard	3-1	Sept 15	Over-Counter	Electronic measurers Street, store lighting Restaurants, motels Corn processor No 2 in Jersey City No 1 silversmith
Holophane Co	2-1	Jan 4	Amex	
Hot Shoppes	2-1	Dec 22	Over-Counter	
Hubinger Co	2-1	Vote Mar 28	Over-Counter	
Hudson County Nat Bk	2 ¹ / ₂ -1	Nov 15	Over-Counter	
International Silver	3-1	Vote Apr 26	Big Board	

vidends. Thus last month American Stores issued 5% in stock for the eighth consecutive year. Others with regular stock disbursements include Cerro Corp 6%, Diamond Alkali 3%, Eastern Air Lines 2%, Monsanto Chemical 2%. At times companies

feeling the need to conserve cash will stop regular cash dividends altogether and issue stock instead: Construction Products (Amex) last month paid 2% stock in place of the regular 6ϕ quarterly dividend.

One extra twist is to pay preferred

... THE BIG BOARD, AMEX AND ELSEWHERE

COMPANY	THE	APPROX DATE	WHERE	MAIN BUSINESS
International Paper	3-1	Dec 30	Big Board	No 1 paper maker Temp control systems Chems; rare metals Oil & uranium Auto prts, vacuum ware Cosmetics, drugs
Johnson Service	2-1	Vote Apr 5	Over-Counter	
Kawecki Chemical	2-1	Vote Apr 28	Amex	
Kerr-McGee Oil	2-1	Vote Apr 27	Big Board	
King-Seeley Thermos	2-1	Dec 9	Big Board	
Lehn & Fink	3-1	Vote Apr 20	Big Board	
Lincoln Nat Life	2-1	Apr 1	Over-Counter	Ord life, re-insurance
Lone Star Gas	2-1	Feb 21	Big Board	Nat gas in Tex, Okla
Loral Electronics	3-1	Nov 28	Amex	Military electronics
Marshall Field	2-1	Vote May 3	Big Board	Chicago emporium
Martin Co	2-1	Feb 14	Big Board	Missiles, electronics
McGraw-Hill Publishing Means (FW) Mergenthaler Linotype Munsingwear Inc Nat Bk of Commerce	3-1	Mar 20	Big Board	Business Week, biz pubs
	5-1	Jan 11	Midwest	Towel service
	4-1	Mar 30	Big Board	Typesetting machines
	2-1	Sept 21	Big Board	Under & sportswear
	2-1	Jan 16	Over-Counter	No 3 in Houston, 75 in US
Nat City Bank	2-1	Feb 17	Over-Counter	No 2 in Cleveland, 34 in US
Northern Trust	5-1	Sept 15	Over-Counter	No 4 in Chicago
Northern Ind Pub Serv	2-1	Vote Apr 12	Midwest	Hammond, Mich City
Pacific Indemnity	3-1	Oct 26	Over-Counter	LA-based underwriter
Petrolite Corp	5-1	Vote Apr 17	Over-Counter	Chemical cmpds & wax
Pfaudler-Permutit	2-1	Vote Apr 19	Big Board	Corrosion resistant equip
Philadelphia Electric	2-1	Vote Apr 12	Big Board	Brotherly Love environs
Procter & Gamble	2-1	Vote Mar 14	Big Board	Chief US soapster
Ranco Inc	2-1	Feb 20	Big Board	Appliance & auto controls
Revlon Inc	2-1	Vote Apr 19	Big Board	Cosmetics, toiletries
Richfield Oil	2-1	Vote Apr 20	Big Board	Mainly on West Coast
Rorer (William H)	4-1	Vote Apr 11	Over-Counter	Ethical drugs
Sanders Associates	2-1	Oct 19	Over-Counter	Electronic systems
Schjeldahl (GT)	2-1	Nov 15	Over-Counter	Plastic domes
Seton Leather	5-1	Vote Mar 21	Amex	Patent leather, specialties
Sierra Pacific Power	2-1	Vote Mar 27	Over-Counter	Parts of Nev & Calif
Signode Steel Strapping	2-1	Sept 1	Big Board	Steel bands & seals
Suburban Gas	2-1	Vote Mar 7	Big Board	LP-gas in West
Talcott (James)	2-1	Vote Apr 5	Big Board	Finance & factoring
Technical Materiel	2-1	Vote Apr 3	Amex	Radio commun equip
Texas Eastern Trans	2-1	Vote Apr 24	Over-Counter Over-Counter Big Board Over-Counter Big Board Big Board	Major pipeline
United Utilities	2-1	Vote Apr 4		Phone, LP-gas holdg co
Universal Leaf Tobacco	2-1	Nov 9		Chiefly for cigarets
Van Camp Sea Food	2-1	Mar 10		Canned fish; oils, vitamins
Wallace & Tiernan	2-1	Dec 19		Chemicals, drugs
Winn-Dixie Stores	2-1	Oct 31		Top Southern food chain

stock on the common shares. Early last year Schenley Industries began making quarterly disbursements of eight shares of 50ϕ convertible preferred for each 100 common in addition to the 25ϕ cash handout. Foremost Dairies for its last two quarterly payments has dropped its

SOME POSSIBLE STOCK SPLITS

All lack official confirmation

Aldens Inc American Home Products American Hospital Supply Associated Dry Goods Avon Products

Bank of New York Baxter Laboratories Beauty Counselors Beckman Instruments CIT Financial

Campbell Soup
Canadian General Electric
Columbus & Southern Ohio Electric
Consolidated Edison
Corning Glass Works

Fairchild Camera & Instrument Florida Power & Light General Precision Equipment Georgia-Pacific Corp Gillette Company

Goodyear T & R of Canada Heller (Walter E) Hershey Chocolate Industrial Acceptance (Canada) Ingersoll-Rand Company

Interstate Department Stores Kansas City Life Litton Industries Mead Johnson Minneapolis-Honeywell Regulator

Otis Elevator Pacific Gas & Electric Plough Inc Reynolds (RJ) Richardson-Merrell

Scott Paper Searle (GD) Texaco Inc Texas Instruments Texas Utilities Time Inc 25ϕ quarterly cash disbursement and instead issued one \$2.25 preferred share for each 200 common.

Stock dividends and splits add nothing to the basic value of any holding-investors get simply two shares for every one in a 2-for-1 split; the stock price and earnings power are also cut in half and the holder's percentage of ownership in the company remains the same. But there is no question investors love them. In fact many seem to approve even the small stock dividends which replace cash. Inland Credit Corp. took a poll in December and an overwhelming 88% of replying shareowners voted for stock rather than a cash handout. Inland Credit will comply with 21/2% on the Class A & B shares in April.

In the case of full-fledged splits there are a number of practical as well as psychological reasons for their popularity. For thinly traded issues with small capitalization the additional shares can result in a more stable market with fewer violent price fluctuations. Also stock fissions tend to put the shares in a popular price range. But even after Christiana Securities splits 80-for-11 the stock will still be close to 200. And based on the current level of IBM, the 3-for-2 split will leave the stock above 400.

But most important, splits generally mean things are going well with the company. And in the massiority of cases, this well-being is reflected concretely by a hike in dividends. Among the companies which have recently followed this agreeable pattern are Kerr-McGee O

which last month upped its quarterly dividend a dime to 40ϕ and proposed a 2-for-1 split and Lone Star Gas which this month will pay 25ϕ on the new shares v an adjusted $22\frac{1}{2}\phi$. Also Procter & Gamble will increase its effective rate to 40ϕ from 35ϕ as will Ranco.

Small stock dividends, if the company maintains its same cash rate on the increased shares, provide similar boosts in stockholder "take-home pay."

Meantime the fact the economy is not booming, even though most stock prices are, also leads to some hesitation by potential splitters. American Hospital Supply chairman Foster Glendale McGaw said early last month: "We discussed a stock split at the last board meeting but we decided it would be premature. We don't want to commit ourselves until we see what the profit picture is like in the first quarter." With earnings in 1960 up 4¢ to \$1.60 a share for the seventh consecutive rise and the future outlook rather good, American Hospital Supply is considered a likely splitter by most Wall Streeters.

But for a number of other companies, recession impacts will probably postpone split considerations for some time. This is especially true for some of the big steelmakers, as well as some higher-priced chemical and building materials stocks. Special circumstances may also dictate postponement. Thus neither duPont nor Brown Shoe is apt to take any split decision until their antitrust cases (both now before the Supreme Court) are settled.

TEXTILES Industry Future

IN THE lead article on textiles in the February 15 issue, INVES-TOR'S READER inadvertently quoted John M Cheatham, president of the American Cotton Manufacturers Institute, out of context. He was reported as telling the Association of Cotton Textile Merchants: "There's no point in being here to discuss ways of improving textile affairs because sooner or later most of us will be out of business." However this statement in the speech was preceded by the qualifying phrase, "If the import problem is not solved * * *." This unfortunately was omitted in the IR text and we apologize for any resulting misinterpretation to Mr Cheatham and the American cotton industry which "looks to its future with anything but gloom."

In his speeches as a leading industry spokesman Mr Cheatham has frequently stressed that textile imports, which have doubled in the past year, loom as the greatest single industry concern.

But, as the IR story reported, he has also underscored the technological, research styling, product and marketing advances made by the textile industry while urging redoubled emphasis on modernization and production efficiency plus efforts to solve the rising flood of textile imports from low-wage nations.

In viewing the textile future, IR also typographically underrated industry prospects by listing estimated US fiber consumption for 1970 at 7.4 million pounds. It should have been billions.

BUSINESS AT WORK

WALL STREET **Positive Phrasing**

TIKE certain generals who reported La triumphant "advance to the rear." writers of corporate dispatches at times hunt for happier euphemisms when beset by setbacks. An outstanding example: "In 1960 we managed to increase our tax loss carry-forward by \$4,200,000."

In this particular instance the author, head of a Southern utility, spoke strictly tongue-in-cheek to some knowing security analysts. But all too often the rear-advancers speak in dead and deceptive earnest, leaving it to the investor to investigate and decipher carefully.

Delinquent Dowry

DESPITE the avowed stockholder interest in dividends there are some stockholders who either couldn't care less or else are just plain careless. Consequently, under the Abandoned Property Law of 1947, Merrill Lynch this week had to turn over to the New York State Tax Commission the tidy sum of \$89,-830.

It represents the amount of unclaimed dividends for the year 1955 on stock which the owner asked to have registered in Merrill Lynch's "street name" though he took personal possession of the physical certificate. When stock is left in Merrill Lynch's vaults for the stockholder's account there is of course no such problem.

The amount forfeited to the state has varied over the years but the current payment is by far the larg est in Merrill Lynch history. Th previous peak was \$66,565 which represented the unclaimed dividend for an 18-month period in 1946-4 and was turned over to the state in 1953. Last year Merrill Lynch paid out \$56,880 in unclaimed dividend for 1954; the year before they to taled \$37,100.

Most of the missing owners ar either very large or estate account which prefer to operate in some se crecy, therefore register their stock in street name rather than their own Since the dividend-paying corpora tions make out their checks to what ever name is on the certificate, the cash goes automatically to Merril Lynch with no further identification Therefore unless the stockholde claims his dividend Merrill Lync has no way of knowing to whom i is due. And New York State pro ceeds to get a nice windfall eacl year.

MANUFACTURING **Brake Shoe Brief**

TN ITS annual report out this week \$124,000,000-assets America Brake Shoe Company, like many US corporation, tells its stockholder 1960 was not a particularly good year. The 59-year-old heavy equip ment manufacturer has earned profit and paid a dividend ever year in its history. But in 1960 ship ments were off 2% to \$164,600,00 and profits eroded 26% to \$5,700 000 or \$3.48 a share from \$4.72.

This was better than deeply re

cessed 1958 when earnings dropped to \$2.97 on \$138,000,000 volume out represents a further decline from the balmy 1956 record of \$6.64 netted on \$186,000,000. However the 60¢ quarterly dividend in effect the past three years has been maintained and is judged "secure at present business levels."

Principal reason for last year's crimp: a combination of higher costs. Leading the list of unusual expenses was strikes. Brake Shoe had ten during the year and one—a dispute over work rules in its Chicago Manganese Steel division-lasted nine nonths. In all, these disputes cost over a million man-hours. All have been settled and vice president & reasurer Thomas W Russell Jr says: 'We are not looking for any serious abor trouble this year." Besides increases in wages and substantial improvements in employe benefit plans, other unusual expenses included noving the Kellogg airborne hydrauic products division from Rochester, NY to Oxnard, Cal and start-up costs of a plant at Vierzon, France and ther European installations.

Although some of these costs are non-recurring, Brake Shoe's woes to not end with this report. Its most pasic problem, reduced orders, still plagues the company. Business this arst quarter of 1961 is not good according to 44-year-old "Tuck" Rusell. Furthermore, he finds it difficult to predict an upturn. Manufacturing backlog at the end of Februry was about \$30,000,000 compared to \$40,000,000 a year agound while February showed "a very light increase," outlook for the

year is regarded uncertain at best. Treasurer Russell notes: "The way things look now we may do well this year to match 1960 earnings."

American Brake Shoe's present difficulties are partially explained by the fact order declines have hit all its big operations. The company is traditionally though reluctantly classed as a manufacturer of rail supplies—brake shoes, track accessories, wheels and bearings. Though it has diversified widely over a four-decade span, most of its non-rail customers are also in cyclical heavy industries.

Transition at Brake Shoe

Rail products still accounted for 38% of sales in 1960 (off from 51% in 1950). Its other sales—bearings, castings, brake linings, forgings, hydraulic equipment and the like—went to customers in construction and mining (20%), autos and farm machinery (14%), machinery (12%), steel and primary metals (5%), aerospace (5%), oil, chemicals and others the remainder. Tuck Russell stresses management is not satisfied with the present product and customer line-up, is proposing an even wider spread.

Consequently, news from ABK (Big Board symbol) in the future is likely to emphasize changes in the company's make-up. For instance "possibly within a year" American Brake Shoe will adopt a new name. "The decision has been made and the new name selected," says treasurer Russell, "though the choice is subject to revision. The new name will be designed to clarify the fact we are not principally a rail equip-

per though it will still be meaningful to the railroads."

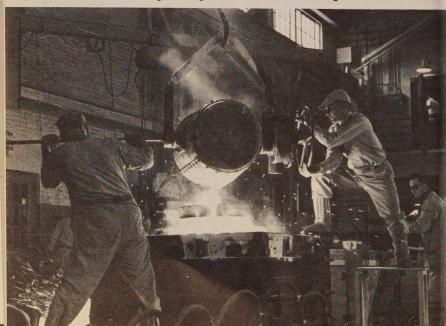
In addition, ABK is hard at work moving into what it regards a prime growth field, instruments & controls. This market was selected after two years of conferring with consultant Arthur D Little Company. Explains Tuck Russell: "We plan to develop this both internally through research and externally through acquisition." Brake Shoe made its first step in the instruments field last December with the purchase of Dynisco Inc of Cambridge, Mass. It makes electromechanical transducers and other sensitive measuring devices. Three more possible acquisitions are currently being studied and one involving a "smaller" company has reached the "serious negotiation stage."

Although a tie-in with ABK's present product lines was reportedly only a marginal factor in weighing

new growth prospects, Brake Shochas been in the industrial controls business since its acquisition of hydraulics specialist Denison Engineering of Columbus, Ohio in 1955 Denison has more than doubled sales of its pumps, presses, valve and controls since then, is regarded as a top growth prospect among existing divisions.

Other growth candidates include the Kellogg division and little, 1959 acquired Raymond Atchley Inco Los Angeles, a producer of serve system components for missiles and industrial automation controls. According to its treasurer ABK is also hopeful about business abroad again with stress on hydraulics. Be sides the Vierzon plant which was acquired last year, Brake Shoe expanded its two-year-old Europea activities with purchase of Parisbased Necto SA which is France

High-strength steel for missile casting



No 2 maker of auto brake linings. In summary Tuck Russell remarks: "Looking beyond our present business, our outlook is more optimistic. We confidently expect to hold our own in traditional fields, expand hydraulics and find a solution to getting into the instruments & controls business without giving away the stockholders' money."

Some 16,000 holders watch ABK stock, which currently trades around 44, near the middle of its 51.35 range for 1960-61. This is off from its 1959 peak of 58 and postwar high

of 64 in 1946.

BUILDING SUPPLIES Owens-Corning Confab

PRESIDENT Harold Boeschen-stein of Owens-Corning Fiberglas paid a visit to the New York Society of Security Analysts a fortnight ago and stated: "Our business at this time is somewhat lackluster. We're not quite happy with the

current performance."

While the nation's chief fiberglass maker set a new sales record of \$218,000,000, this was only 3%above 1959 and disappointing in the light of earlier predictions. More disappointing, profits were off 10% to \$14,600,000 or \$2.19 a share. And the downward trend has continued in January and February.

Harold Boeschenstein expects first quarter sales to be "modestly below" the \$51,200,000 sales of a year ago. "These lower sales should also be reflected in reduced first quarter profits." But he looks for "a reversal of this downward trend by mid-year."

One encouraging factor is the company has commitments from twice as many home builders for Fiberglas building products than at this time a year ago. Even though in 1960 housing starts were off 18% from 1959, Owens-Corning's building products sales grew "considerably." Thus Harold Boeschenstein feels the construction business this year "is going to be good for Owens-Corning."

While 64-year-old Boeschenstein admits "overexpectancy for 1960 sales and earnings led to current disappointments," he feels "on balance 1960 was a year of progress for Owens-Corning." He particularly noted new and improved processes, products and methods for making Fiberglas fibers and yarns; the establishment of the Owens-Corning Technical Center for research, testing, process & product development, and substantial completion of the capital improvement program. This includes a new Fiberglas textile products plant at Aiken, SC; new facilities and major conversion to improved processes at all nine plants: relocation and centralization of research & product development; additional insulation and acoustical product distribution centers. In all, capital improvements last year totaled \$42,000,000. Harry Boeschenstein notes, "with completion of the major part of the expansion program expenditures for 1961 are scheduled to run between \$12- and \$15,000,000."

Last year's record expenditures bring the company's capacity to \$300,000,000 a year of Fiberglas products at current prices. The company's largest market is the commercial and industrial construction field. Its second biggest mart is home building products and third, sales to manufacturers.

Last year the biggest Owens-Corning gains were in textile yarns and decorative fabrics which increased 38% despite the business slowdown. President Boeschenstein comments: "The trend upward is continuing." Another expected upturn is in the boat business. Trim-looking Harold Boeschenstein notes: "After falling considerably last year with overordering of materials and over-optimism by builders, the boat business is due to come back." He says this year half the boats under 40 feet will be made with plastic reinforced fibrous glass.

For Furniture & Autos

But headman Boeschenstein is not concentrating all his hopes for increased sales on boats and fabrics. The company has diversified fiber sales into new marts like furniture and autos. Another area of increased fiberglass use is screening. Harold Boeschenstein notes: "Our Fiberglas screening now carries a ten-year guarantee which gives us a better competitive position with makers of aluminum screening."

Fiberglass is also finding growing use in indoor paneling, aircraft parts where light weight and high strength are important and filters for air pollution systems. President Boeschenstein sums up: "We in Fiberglas look forward to a highly competitive decade but one of great opportunity for our versatile materials and products."

SOAPS

Colgate-Palmolive Lathers Up For the Future

W/ORLD yearning for cleanliness is reflected among other things by the continued rise in foreign sales (up 8% last year despite Cuba) of the Colgate-Palmolive Company. However the combined impact of recession and a shift in inventory methods and other corporate procedures lowered the company's domestic volume by about 3%. Added together, this left Colgate's worldwide sales at \$576,300,000, a fraction of a percent below the 1959 peak, while earnings dropped to \$21,200,000 or \$2.53 from the record \$3.11 registered in 1959.

Recently elected president (last April) & chief executive officer (July) George H Lesch warns profits are expected to stay on the same level for the next few years since "we're embarking on a major fiveyear expansion plan which is going to require a great deal of money." Profits will be plowed back to "build a solid base for real growth." The program will take three directions: acquisition of companies, preferably for cash; acquisition of products and a "crash program" to produce new products from within the company.

While the 155-year-old company, has long been a leading manufacturer of soaps, detergents and toiletry articles, it entered the drugfield only last year when it acquired proprietary producer S M Edison (chiefly Dermassage and other hos-

nital specialty products) in January and ethical specialist Lakeside Latoratories a month later. Lakeside, with some drugs used for heart onditions, mental depression, animia, asthma and gastrointestinal disorders, "was bought for its exellent research staff more than for ts products." Drug products should be "a natural" for Colgate-Palmlive's 2,000 salesmen who sell to 0,000 drug stores throughout the ountry.

At the same time Colgate is fully lert to the changing marketing patern for its principal products. By ow an estimated 70% of toiletry urchases (especially such Colgate tandbys as toothpaste and soap) re made in supermarkets as of ourse are nearly all sales of deterents and like household products.

Colgate readily admits it is alvays on the lookout for other comanies which fit into "our general rea" though no acquisition offers re being seriously considered at resent. The company is also out to romote direct acquisition of prodcts or the units which make them. at the beginning of this year it urchased the Consumer Products ivision of Unexcelled Chemical for s leading product, Wash'N Dri prenoistened towelettes. A Colgate pokesman "sees a great future or Wash 'N Dri through expansion f its outlets to include restaurants, olf clubs and other institutions as ell as adaptation of its principle such products as nail polish renovers or even hair lotion aplicators."

To achieve its "crash program"

of new products developed from within the company, financial vp Hugh Jewett reports: "We will probably spend about a million more for R&D this year than the \$6,500,000 expended in 1960." A new research center near New Brunswick, NJ is to be ready early next year.

While R&D funds in the past were used mainly for improvement of existing products, research efforts will now be directed toward development of new products so the \$375,000,000-assets company can improve its competitive position in the domestic market. A new soap product is expected shortly and researchers are currently studying the possibilities of a "unitized" detergent—a box of individually packaged, pre-measured units which dissolve package & all in the washing machine (Lestoil Products Inc's Lestare has such a package for bleach). They are also working on a liquid detergent in the "heavy duty field."

Colgate Cuts Costs

Colgate-Palmolive is also conducting a cost-cutting program which should shave \$1-to-2,000,000 from expenses this year. In the first half of last year it instituted a new dealer inventory program although this involved a loss of \$5to-6,000,000 in sales during the changeover. The new system provides for continuous replacement of inventories in response to consumer demand rather than bunching up of orders at the end of each quarter. It should eliminate "overstuffed warehouses" and the need for salesmen's discounts to dealers at the end of each quarter while permitting



Colgate packaging automation

steadier manufacturing as well as more continuous retail selling.

The big soapmaker spent \$15,000,000 for expansion last year, much of it overseas to build detergent plants in South Africa and Australia and to get its new Italian and German plants on stream. Colgate presently has 42 overseas subsidiaries, markets in 135 countries and plans new plants in Malaya, Thailand and Central America.

While foreign sales have eclipsed domestic volume since 1959, Colgate is counting on its new expansion program to "make domestic growth as dynamic as our rate of foreign growth." Total capital expenditures in 1961 are budgeted at about \$25,000,000. Hugh Jewett says financing of the program "will be with inside money so far as we can foresee today." Colgate's strong balance

sheet showed \$64,000,000 in cash & equivalent at last report.

Thus there should be no dilution for the 8,200,000 Colgate-Palmolive common shares which currently trade around 35 on the Big Board (symbol: CL), down from the 1959 peak of 44. CL shares sell for only 13 times 1960 earnings compared to a price-earnings ratio of about 30 for Procter & Gamble—which in the past has been more aggressive in widening its product scope and expanding sales and earnings. Now the Colgate team, which has a stronger position abroad, is trying to catch up on an overall basis.

While first quarter 1961 sales "are running better than last year at this time," vp Jewett states, "we don't expect any dramatic change in sales this year but in five or six years we expect to do about a billion in volume." President Lesch fills in: "I expect to see sales grow substantially in 1962 and 1963. This program should produce accelerated profit for the company by 1963."

MUNICIPALS Easier Gains

THOSE WHO BOUGHT municipal bonds in the last four months have had the pleasure of seeing their investments appreciate in price as well as succeed in their main object tive of providing a generous tax exempt yield. Lately though, yields have leveled somewhat as the number of new municipal issues being offered has increased.

The index of 20 representative 20-year municipal bonds compiled by the *Daily Bond Buyer* has seepee

rom 3.55% in early October to 3.26% lately. Prices of bonds have f course moved up correspondingly.

The move began when a conviction started to spread among municipal market participants that the Democrats would: 1) be elected and 2) move in the direction of easier money. Now with the Federal Reterve Board retreat from its hotly lisputed "bills only" policy and its purchase of some longer-term issues, a step has been taken towards easier money for longer obligations though hort-term rates have been bolstered.

But while the municipal market ends to move with the market for Government and investment-grade torporate bonds, it has separate haracteristics also. A particular one is the supply & demand for municipal issues. Thus even if yields of the ong-term bonds generally are moving strongly in one direction, a large hange in the number of new municipal issues coming into the market ould offset the move.

The two phenomena are often reated—the lower interest rates go, the more states, cities and public uthorities rush to take advantage of the market. The reverse also holds; igher rates bring fewer borrowers.

Right now, as could be expected, he calendar is crowding up somewhat. The Bond Buyer's tally for success set for marketing in the ext 30 days recently reached \$409,00,000 as against \$250,000,000 in arly February. A \$100,000,000 lew York State Power Authority successed at the success of the

The flow of new merchandise has also begun to crowd inventories a bit on dealers' shelves. This is shown by the climb to \$392,000,000 in bonds advertised in the daily *Blue List* against \$326,000,000 early in 1961.

A look at the municipal bond line-up shows a new long-term bond with Aaa rating and a good name selling around 3.35% as against 3.55% last October, an Aa bond for 3.45% v 3.65%, an A bond for 3.60% v 3.85% and a Baa for 3.75% v 4.00%. But where heavy supplies have built up in otherwise highly rated bonds, some yields tend to be a bit higher.

STEEL Lukens Mixture

JUST BACK from a week's vacation in Mexico and looking refreshed, president Charles Lukens Huston of Lukens Steel Company said: "We have the right product mix now, but we'd like to have a few more orders. If you have any in your pocket, hand them over."

The "right mix" for the \$86,000,000-assets specialty steelmaker is two-thirds specialty steels and one-third carbon steels. The Coatesville, Pa company lists among its specialties armor plate, clad steels ("they're steel sandwiches—high-strength light alloys pressed against either side of more inexpensive backing"), alloys and such dizzying products as pressed & spun heads (for chemical tanks), nine-nickel steel and T-1 clad. The carbon steels are plates and Lukens can make some of the biggest in the business.

The entire Lukens operation is

confined to the 14,000-population town of Coatesville on the Lincoln Highway about 35 miles west of Philadelphia. Chuck Huston explains: "Back in the Twenties a decision had to be made. Instead of combining with other companies or being absorbed, Lukens chose to go it alone in the plate end of the business. We're a cold metal shopwe have no mines or blast furnaces." Instead Lukens buys pig iron and scrap, turns them into steel in its open hearth furnaces and its brand new electric arc furnace and rolls the resulting ingots into the multiplex shapes the customers want.

Principal customers for Lukens now are the "processing industries" like oil, chemicals, petrochemicals, heavy electrical equipment—the ones from whom Chuck Huston would like "a few more orders." Says he: "They are filling their day-to-day requirements. But they are not building right now for a sustained improvement in their own picture." He adds: "We do not yet see signs of a pick-up. There is some hope there may be, but our customers haven't experienced it yet."

In keeping with industry-wide reluctance, Chuck Huston does not give a figure for Lukens' current operating rate but he does say the company is operating ahead of its 1957-59 average capacity. This capacity was around 800,000 ingot tons a year. Lukens capacity now, aided by a \$40,000,000 expansion program, is 925,000 tons a year.

Translated to sales for the year, this outlook shapes up as "about the same as 1960 or maybe a little better." He adds: "I think we're all a little chary on prognosticating almost anything anybody said at the beginning of 1960 turned out to be cockeyed as all getout."

Last year Lukens sales came to a respectable \$103,000,000. Naturally hindered by the recession, this volume compares with \$83,100,000 during strike-afflicted 1959 and with \$130,500,000 during Lukens' vintage year of 1957.

On profits Chuck Huston makes no predictions at all. "We don't know what the mix will be" as the year progresses. In 1960 Lukens reported earnings of \$4,950,000 or \$5.19 on its 954,000 common shares. For the previous year the company listed net profits of \$2,600,000 or \$2.72 a share, not counting a special credit of \$1,590,000 or \$1.67 a share for adjustments. While well ahead of 1959 operating earnings in any case, the 1960 figure does however include a special credit from unused reserves.

Chuck Huston explains the company in the last three years has been shifting its method of cost accounting from an "actual cost" system which required setting aside a good deal of money in reserve accounts to handle fluctuations to as "predetermined unit cost system," which "sends up red flags immediately and gives us a much better idea of the current picture." In the process Lukens has been "cleaning up some 60 reserve accounts" for which they have no further use While accountants felt good pract tice did not require an explanation of how much of 1960 earnings came om these reserves, Chuck Huston tys it was about 20% of the \$4,-

50,000 reported.

In its recent capital equipment rogram, Lukens added a brand ew 100-ton electric arc furnace hich increases its ingot capacity almost 25% and a new mill spable of rolling slabs 140 inches ide. The latter supplements a 206-toch mill—biggest in the US—and a older 140-inch mill.

Of the \$40,000,000 or so borowed for these improvementsost of it in a loan from customers, ith payback based on the amount steel bought-Lukens has reduced s debt to around \$19,000,000. It ced off \$7,000,000 in the past year. In its specialties Lukens has conantly been "scratching around to nd new ones;" just recently it inounced it can make plastic clad eel plates. The plates are dipped in eated, viscous polyvinyl chloride astic. When cooled the plates in be bent and shaped for many es. A prime use: to prevent corsion in chemical tanks-including ose for sea water de-salting.

Family-owned for most of its 50 years, Lukens Steel now prents a balance between family intest and public participation. narles Lukens Huston, whose great andfather Charles Lukens married e daughter of founder Isaac Pencek, is president. Older brother ewart, who is a vp and secretary, d sister Ruth, who is active in arities, are on the board. The famowns 38% of the shares.

On the other hand the remainder the management and board come



Lukens' Huston starts a furnace

from outside the family. And there are some 3,500 public stockholders. The stock is traded on the Big Board and because of the small number of available shares is subject to wide fluctuations. In 1957 when company results far exceeded expectations (largely because of steel plates for the Suez tankerbuilding boom) the shares rocketed to $122\frac{5}{8}$ from $45\frac{3}{4}$ in $3\frac{1}{2}$ months; this included one 48-point rise in 24 days. Since then they have dipped fractionally below 50, currently trade around 72. Lukens stock was last split in 1957 when a 3-for-1 break-up was ordered. Stewart Huston says any further move requires unmistakable signs the company will be able to show increased profits to justify the increased shares.

High Purity Opens New Metal Worlds

Many Exotic Elements and Some Familiar Workhorses Get Fancy New Personality

HUNDRED yards from Ameri-A can Smelting & Refining's Baltimore copper refinery is a manmade mountain of mud and sludge. A little over two years ago this heap of copper refinery waste was economically worthless. Today if refined to a high-purity state it would be valued at over \$15,000,000. Reason: the mound contains quantities of tellurium, a promising element for space age and electronic use.

Discovered in 1782, tellurium has long been available as a by-product of copper and lead refining. But only in 1957 was the metal available in a high-purity state and its unique characteristics of heat and electrical generation discovered.

A parallel story can be told of many metals. Metallurgists are finding many familiar (arsenic, bismuth, copper, silver) as well as rare metals (antimony, indium, molybdenum, tungsten) when refined to a pure state take on properties not normally present in less pure or standard commercial forms. Thus metallurgy has entered a fascinating new field of study where commonly held concepts are being rapidly replaced and metals with long-established roles are taking on unheard-of uses.

This new science of high-purity metallurgy employs some of the most advanced chemical and electrochemical techniques known. Only in the last few years have methods of refining, molding and fabricating high-purity metals been developed.

One of the leaders in research technology and production is American Smelting & Refining (Asarco) which in 1954 produced only two high-purity metals, lead and copper (output is of course minute compared with Asarco's regular lead and copper refining). Today the company makes fifteen 99.999% pure elements including gold, silver, cadmium, indium, tellurium, thallium and zinc. Other leading highpurity metal producers include Consolidated Mining & Smelting of Montreal; Canadian Copper Refiners division of Noranda Mines; Indium Corp of America (only indium) and Kawecki Chemical of Boyertown, Pa.

Electronics Boost

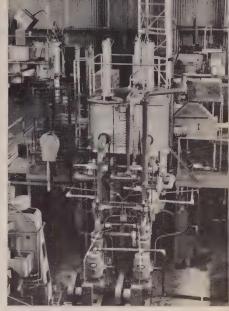
One area of prime high-purity metals research is electronics. If minute electronic components are made of high-purity metals like bismuth and antimony, the components can operate at greater speeds and versatility than those components made of semiconductor materials such as silicon and germanium. Actually bismuth and antimony are "semimetals." They differ from metals and semiconductors in their manner of conducting electricity. Metals conduct only by electrons; semimetals as well as semiconductors by both electrons (negative carriers) and by positive carriers called "holes." Semimetals have a higher energy level than semiconductors; the energy levels of the electrons and "holes" actually overlap. Work in semimetals is still n the basic and theoretical experimental stage but Dr Benjamin Lax of MIT reports: "Important applications are seen for communilations systems, radar and computers."

A more immediate application of present technology is the use of high-purity intermetallic compounds such as indium arsenide, gallium arsenide and indium phosphide to make electronic components. Also high-purity silicon crystals are doped" with specific minute particles of high-purity arsenic; as a result the behavior of the silicon electrons can be calculated and controlled.

Missile Makers Besides increasing electronic

peed and power, high-purity metals esearch has aided missile fuel deelopments. The addition of highourity aluminum to the solid fuel of the Polaris increases the missile's ange about 20%. In smaller missiles he addition of certain powdered metls yields even greater range gains. Other high-purity metals speciically tailored for space age use re columbium, molybdenum, tantaum and tungsten. These metals have nelting points in excess of 3,600° F and their alloys are being adapted or use as structural materials, nose ones and outer skins for missiles nd space vehicles to withstand exreme pressure, heat and corrosion. Example: the X-15 rocket plane's uter surface is covered with Inonel-X, an alloy which contains olumbium. This July substantial roduction of columbium in North

merica will start to get under way at



Stauffer electron-beam furnace

St Lawrence Columbium & Metals Corp. Its \$2,000,000 refinery is located in Oka, Quebec, 35 miles north of Montreal.

One of the most promising metals with space-age potential is beryllium (IR, January 4). The metal is extremely light and stiff but offers very good thermal protection. While it is brittle at normal temperatures it can be made malleable by highpurity techniques such as electron beam refining (see picture above), and experts indicate the first mancarrying space vehicle will use a substantial amount of beryllium.

Research Boom

But the biggest boost to highpurity metals growth has been the burgeoning of thermoelectrics. When electricity is passed through most metals, they become warm (the basis of all resistance heaters). But

SOME METALS FOR THE SPACE & ELECTRONICS AGE

Adami	Chief Dundusous	Major Uses
Metal	Chief Producers	
Antimony	National Lead, Am Smelting & Refin- ing, Sunshine Mining, Harshaw Chemi- cal	Corrosion inhibitor in lead stor- age battery plates, bearings and special alloys
Arsenic	Am Smelting & Refining, Anaconda, US Smelting & Refining	Insecticides, "doping" semicon- ductors, thermoelectric applica- tion
Beryllium	Beryllium Corp of Amer, Brush Beryllium	AEC, aircraft, missiles, space vehicles, beryllium copper alloys
Bismuth	Am Smelting & Refining, Anaconda, US Smelting & Refining, Cerro Corp, Am Metal Climax	Alloys for metal working, to increase machinability in iron and aluminum castings, indigestion remedy, catalyst in production of plastics, prime material for thermoelectric devices
Cadmium	Am Smelting & Refining, Am Metal Cli- max, Bunker Hill, Am Zinc, Lead & Smelting, Anaconda, St Joseph Lead	Electroplating, pigments & chemicals, alloys, storage batteries
Columbium	Union Carbide, Fansteel Metallurgical, duPont, Wah Chang, Kennametal, Ka- wecki Chemical, Molybdenum Corp	Nuclear, aircraft, space proto- types & equipment
Germanium	Am Metal Climax, Am Zinc, Eagle- Picher, Sylvania	Electronic devices
Hafnium	Wah Chang, Carborundum Metals, Co- lumbia National, Mallory-Sharon Met- als, Foote Mineral	Neutron absorber for controlling nuclear reactors
Indium	Indium Corp, Am Smelting & Refining, Anaconda, Consolidated Mining & Smelting	Semiconductor devices, bearings & special alloys
Molybdenum	American Metal Climax, Kennecott Cop- per, Molybdenum Corp	90% in iron & steel alloys, cast t iron, high strength alloys
Selenium	Am Smelting & Refining, Allied Chemical, Am Metal Climax, International Smelting & Refining, Kawecki Chemical, Kennecott Copper	90% rectifiers and photoelectric : cells
Silicon (high purity)	duPont, Texas Instruments, Sylvania, Eagle-Picher, Merck, International Met- alloids	Electronics (semiconductors—diodes, rectifiers and transistors), optics
Tantalum	Fansteel Metallurgical, Union Carbide, Kawecki Chemical, Kennametal, Wah Chang	Capacitors, rectifiers, high temp? alloys, process equipment
Tellurium	Am Smelting & Refining, Anaconda, Am Metal Climax, Canadian Copper Re- fineries, US Smelting & Refining, Phelps Dodge, International Smelting & Re- fining	Compounds one of most prom- ising thermoelectric materials, metallurgy, ceramics, rubber
Titanium	duPont, Mallory-Sharon Metals, Titani- um Metals Corp of Am, Union Carbide	Airframes and jet engines
Tungsten	General Electric, Sylvania, Union Car- bide, Molybdenum Corp, Kennametal, Firth Sterling, Am Metal Climax	Alloy and tool steels, high temps alloys, carbides, chemicals, elec- tronics

ass an electric current through disimilar metals and the junction beween these metals becomes a heat ink (pocket) or heat source deending on the direction of the urrent. Thermoelectricity is simply he conversion of electricity into eat (or heat into electricity) with o intermediate moving parts. By reersing the flow of current, direct ooling is achieved instead of heat. This phenomenon was first oberved 125 years ago by the German hysicist Thomas Seebeck (see IR, anuary 4 for General Instrument's se of "Seebeck Effect") and was sed to develop the familiar thermoouple for measuring temperature. he first thermoelectric materials ad an electric effect too low for ower application but advances in olid state physics resulting from ork on semiconductors have led to

Two of the metals which look most romising are bismuth and tellurim. When tellurium is combined 50-0 with bismuth the resulting bismuth telluride alloy is one of the est materials known for thermolectric cooling. Thus there is a vast otential for no-moving-parts refrigration.

nore effective thermoelectric mate-

ials.

Bismuth like tellurium has been nown since the eighteenth century. Its biggest use has been in drug plutions to relieve indigestion or leers. But with the advent of termoelectrics, bismuth has experenced substantial new demand. Last ear US consumption reached 1500,000 pounds, up from 1,400,000 pounds, up from 1,400,000 pounds.

as a by-product of lead refining by Asarco (world's largest producer), Anaconda (which mines only) and US Smelting.

Other metals being groomed for new thermoelectric roles are antimony, arsenic, lead, selenium and silver.

Metals Mettle

So far the only major commercial uses for thermoelectric devices have been temperature measurement (home heating system thermostats) and safety controls (such as those used on domestic gas hot water heaters). But more consumer products are on the griddle. Lone Star Gas has a prototype bathroom heater fan which works on thermoelectricity generated from waste heat but manufacturing costs (\$50) make the fan uneconomical. General Instrument markets a 5-watt thermoelectric generator (enough power to run an electric clock). But it retails for \$500. In January Westinghouse delivered the first 100-watt industrial thermoelectric power generator to Northern Illinois Gas Company in Aurora.

Westinghouse and General Electric have prototype model thermoelectric no-moving-parts refrigerators. Last week the Norge Division of Borg-Warner announced the sale of 500 noiseless thermoelectric refrigerator-freezers for the new Sheraton-Chicago Hotel. Norge chairman Judson Sayre noted: "This is the first commercial use of a thermoelectric refrigeration system." Cost for a one-half cubic foot capacity unit: \$200.

Westinghouse together with RCA has also developed prototype domes-

tic wall panel cooling, heating and lighting units.

Next month RCA will market miniature electronic components made of high-purity tantalum which will have wide application in space vehicles, data processing and communications. A company spokesman reports: "These solid miniature tantalum capacitors are flat and rectangular in shape and stand on edge—in a given area six times as many new capacitors can be stacked as standard models."

Russian Devices

But in the way of practical devices the Russians are ahead. Back in 1931 Russian physicist Abram Joffe rediscovered thermoelectric power and by War II he and his associates were producing small generators for Red Army field radio transmitters. These generators have since been adapted for mounting on the chimneys of kerosene lamps to produce power for small radio receivers in remote rural regions. The generators have been widely distributed in northern Russia and parts of Siberia, The Russian devices have even entered the Western Hemisphere, sell for \$45 in Mexico.

In the military field where cost is no barrier, thermoelectric developments are moving at a faster pace. Several thermoelectric power systems have been constructed. Among the best known are SNAP (Space Nuclear Auxiliary Power) generators, 5-pound, 5-watt instruments developed jointly by Martin and Minnesota Mining & Manufacturing. Last May Westinghouse delivered a 5,000-watt generator to

the Navy for the highest thermoelectric power output yet. The Westinghouse generator has no moving a parts, delivers enough electricity to light eight-to-ten homes simultaneously. RCA also has made solar satellite batteries which use gallium arsenide to convert solar energy into electricity.

Whirlpool Corp has developed a no-moving-parts cooling device for infrared detector cells in homing missiles. General Instrument and Whirlpool are working on separate projects for cooling subs and space craft.

The chief disadvantage of all thermoelectric devices to date is their inefficient conversion of heat into electric power (top efficiency is around 15% compared with 25-to-30% for the standard auto engine). Another major problem is high materials cost. However a multimillion dollar thermoelectric research & development program now underway hopes to make thermoelectrics competitive with standard power sources. Uncle Sam will pay for most of the research effort.

In the not too distant future this research should pay off. Westinghouse's Dr John Kelly states: "It is reasonable that by 1970 these thermoelectric applications may be realized: domestic refrigeration; heat pumping (replacing vapor compression systems); and power generation of millions of watts for use by utility companies, propulsion of ships and to power a wide variety of industrial machines where high current, low voltage, direct current would be useful."

PRODUCTION PERSONALITIES

APER

Non-Family Man Tries His Mettle On Champion Challenge

XACTLY one year in office this week, the president and chief xecutive officer of Champion Paper Fibre Company is a guy who likes hallenges. His many-faceted career vidences this. Karl Robin Bendeten has been successively lawyer, army officer, Government official, adustry executive.

After receiving his BA (1929) nd LLB (1932) from Stanford e went into law practice in homeown Aberdeen, Wash. He has since ecome a member of the California nd Oregon bar. From 1940-46 he erved in the Army. He left as a full olonel, a rank he still holds in the leserves. In 1948 he served five nonths as special assistant to Secetary of Defense James Forrestal, fter which he returned to law pracce in San Francisco. He became ssistant Secretary of the Army in 950 and Undersecretary in 1952. In 956 he served Ike on special misons to West Germany and the Philppines.

Late in 1952 Karl Bendetsen ook his varied background to hampion. In 1954 he was made eneral manager of the company's exas division; in 1955 vice president. Two years later he was placed a charge of all pulp and paper lanufacturing. When president Reuen B Robertson Jr (81-year-old euben Sr is still honorary chairman) was killed in an auto accident

a year ago, Bendetsen was named to the job and to a seat on the board.

The company he now heads was founded back in 1893 by Cincinnati book publisher Peter Thomson. Today \$200,000,000-assets Champion is one of the largest integrated paper & pulp producers in the US. The three mills at Hamilton, Ohio (also company headquarters), Canton, NC and Pasadena, Texas have a combined capacity of 650,000 tons of pulp and 720,000 tons of paper & board a year.

Through joint ownership (with Diamond National) of Dairypak Butler, Champion has a big stake in food packaging, particularly milk cartons which Dairypak manufactures under a license from ExCell-O Corp. Dairypak consumes about 50% of Champion's foodboard output.

Valuable Timber

As for raw materials, Champion supplies its mills in part (up to 40%) through its own 620,000 acres of timberland plus cutting rights to 100,000 more. The timber properties are carried on Champion's books at \$12,000,000 but are worth far more.

Internationally Champion exports 4% of sales and licenses foreign manufacturers. It also supplies the Brazilian market with bleached kraft pulp through a recently completed 150-ton-a-day mill at Sao Paulo.

Until Karl Bendetsen took the helm last year Champion had always been run by a member of the Thomson family. Reuben Robertson Jr was a grandson of founder Thom-



Champion booster Bendetsen

son. His father, the previous president, was Peter Thomson's son-inlaw.

Family interest and influence are still large. Board chairman is Dwight J Thomson. Also on the board are Dr Logan T Robertson (Reuben Sr's other son), assistant to the president Lewis Clark Thomson and Herbert T Randall, a former vice president and also a member of the Thomson family. All told the family controls over 40% of Champion common.

In his new job Karl Bendetsen is facing plenty of challenges. Both the industry and Champion have been going through some pretty lean years. With uncoated papers currently about 20% overproduced and coated papers "getting there now," the main problem is overcapacity. Speaking for both his industry and his company Karl Bendetsen

remarks: "We are standing kneedeep in a wheatfield. For the past 75 years we have been a growth industry. In not over twelve of those years until the last two have we had anything but a seller's market." Moreover today's overcapacity "is not because of underdemand" and will not be remedied merely by an upturn in the general economy. Says paperman Bendetsen: "We are in a new era now and we don't have a price increase to look to."

The toll on Champion has been heavy. From their peak of \$14,280,-000 or \$3.14 a share in the year ended March 1957, profits fell to \$7,680,000 (\$1.64) in just two short years. They recovered somewhat for the March 1960 year to \$1.98 a share. For the current fiscal vear which ends this month Karl Bendetsen says "we'll be lucky if we earn anything over the dividend [\$1.20]." For the nine months through December profits stood at \$1.03 v \$1.43. While earnings slipped, sales remained around fiscal 1956/7's \$168,000,000 level for three years, then jumped to \$195,-000,000 in the March 1960 year thanks largely to a new machine (a paper "machine" is a massive installation which may cost over \$5,000,-000 and turn out 300 tons of paper a day). So far in the current fiscal year, volume is up another 7%. However the Champion sales growth trend has been below the industry average in the past five years.

The effects of the profits squeeze are evident in the action of Champion common. The 4,700,000 shares outstanding hit a postwar peak of

45 in 1956, fell off to a 38-31 range the following year. As profits improved in fiscal 1959/60 the stock climbed to an alltime high of 51 but with the current year's disappointing results fell to 24, the lowest since 1955. Buoyed by the recent strong market it now trades around 33.

While industry overcapacity can be blamed for part of Champion's woes there was also a lot of excess at in the company. Karl Bendetsen admits: "The causes for our low earnings have been in being for a

ong time."

With this in mind the 53-year-old president who describes himself as 'a professional planner, not a papernaker" is currently leading Champon through a "reorientation in busiess planning." He remarks: "This s a healthy time for us to get lean nd hard, to get down to the kind of organization we ought to have." nstead of "building on the expectaion of increased volume," Champion eople are being trained "to think n terms of profits planning." The ew program extends to all phases f Champion, includes operations esearch, market research, cost anlyses.

First step was just plain cost utting. For example Champion is aving an estimated \$500,000 a year y eliminating its fleet of company lanes. Remarks Army Colonel Benetsen: "We mustered out the Air orce completely. Now we charter thenever we need to." Most comany cars also went the way of avalry horses. There are none to-

company's forest operations "where they are necessary." Also cut was the company's representation at paper conventions. At last month's "Paper Week" sales meeting in Manhattan "we had just about half the people we had last year."

A big saving came in inventories. By "being more specific and accurate on our runs," cost controller Bendetsen estimates "we should save around one and a quarter million a year in normal times, about three quarters of a million in these times."

Job Surveys

Champion management also carefully surveyed every job, both line and staff, within the company. As a result by the end of this fiscal year "we will be operating with about 1,200 fewer people than at the end of last year." This is out of a total work force of 11,000 last year.

Another part of the Bendetsen plan is a strict product analysis. Says planner Bendetsen: "We manufactured 96 different grades of paper but we found that 20% of them provided 80% of our earnings." So Champion has been weeding out many of its unprofitable lines. To keep his distributors happy however, Karl Bendetsen has asked other paper manufacturers to take over the supply of certain grades it drops. He notes the other maker may be set up to handle the line profitably. This is an entirely new concept for the paper industry and one which planner Bendetsen thinks may ultimately help solve some of the industry's overcapacity problems.

Some specialty items have been

dropped too. One is the Vaculite line of metallized papers, a joint development with National Research Corp of Cambridge, Mass. "It was pretty but it had to compete with foil and it offers practically nothing that foil doesn't. We lost \$2,500,000 at least on it, not to mention the cost we would have incurred in trying to operate it."

One specialty product which experimenter Bendetsen feels has great promise is Thermokup, a foam plastic cup with unique insulating qualities. It has been completely redesigned and reprogrammed, will be on the market by July.

The Champion program is not entirely internal. Says Karl Bendetsen: "After we decided what improvements were needed inside we figured out what else we needed to improve our earnings." The something else turned out to be Carpenter Paper Company of Omaha, one of the largest paper merchants in the US. The engagement was announced in mid-December and stockholders of both companies vote next week on the merger which calls for an exchange of 1.825 shares of Champion for each share of Carpenter. This means Champion will issue approximately 1,280,000 shares currently worth more than \$42,000,000.

Carpenter's widespread wholesale distribution system consists of paper merchant houses in 26 Midwest, Southwest and Western states. It also has an envelope business (10% of its \$100,000,000 sales). Champion first went into envelopes last year with the acquisition of Buffalo Envelope Company and Montag Inc.

While Carpenter which last year earned an estimated \$3.50 a share will bring higher profit margins, Champion's inside program will not stop. Says Karl Bendetsen: "By the end of this year our savings rate will be around \$10,000,000 annually and we can do significantly more." His objective: to learn to be strong with overcapacity. "We should be able to make a satisfactory return with only 80% of capacity." He has a way to go. Champion currently operates at about 88% of capacity.

While Champion still needs lots of work on its problems, one immediate bright note is the new Brazilian pulp mill. It started only 13 months ago and "was producing good quality by mid-Summer which is unusual for a paper mill." And contrary to popular opinion that the mill will prove a drain on Champion earnings, president Bendetsen proudly notes "we were in the black by November."

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REPUBLIC TUNNEL

Diversification has been the theme of many an aircraft company in recent years. One of the most popular lines is electronics. One company treading this path is Republic Aviation which has just announced some successful experimental models of a thin-film tunnel diode.

The company emphasizes "a great deal of work still remains to be done, particularly to achieve a higher degree of reliability in the production of

thin-film devices." But it also says its new techniques could mean table-top computers would replace current room-sized units and navigational computers for aircraft and satellites would be no larger than a pocket-sized radio. It could eliminate the need for putting transistors into printed circuits.

The key feature which Republic claims distinguishes its tunnel diode from others is it does not require any special supercooling. Republic asserts previous versions require temperatures near liquid helium (about 450° F below zero) to be superconductive.

Discoverers Franz Huber (right) and Joseph Bloxson of Republic explain they achieved their thinfilm sandwich by capturing titanium vapor on a strip of glass to

form a dielectric (non-conducting) coating or film. They came up with



a special oxidation technique which deposits a film less than one-millionth of an inch thick. Electrons have the ability to pierce or "tunnel" through the thin oxide film.

At this stage of course such electronics work is all but drowned out by the roar of F-105 Thunderjets in Republic's profits pattern. The only company now producing a manned Air Force fighter plane in volume, Republic has a full line in the US budget all to itself: \$397,000,000. Now on a profitable fixed price basis, F-105 production enabled Republic to net \$4,653,000 or \$3.25 a share last year v \$2.37 a share in 1959. And if present military plans continue in force F-105 production is due to run into 1965.

These results so moved Republic's directors that they doubled the company's dividend to 50¢ for the first quarter. The stock responded by climbing o its 1960-61 peak of 37 % near which it currently trades.

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THE THREE R'S OF INVESTING

If we had to name them, we'd probably say that the three R's of investing are Readiness, Research, and Realism. Here's what we mean.

Readiness is deciding to do something about protecting the purchasing power of your dollars from inflation. It's being willing to assume a measure of risk to protect your surplus funds. It's being sure before you invest that you can afford to do so-that you have money for everyday expenses, a fund for emergencies, and adequate insurance coverage.

Research means investigating before you invest-and after you invest; deciding where to put your money to work on the basis of facts and figures rather than tips and fancies; and then watching the performance of your holdings regularly.

Realism means keeping your hopes within reason instead of expecting to get rich overnight, realizing that stocks go down as well as up, and being willing to revise your judgment—and your portfolio-whenever a stock proves disappointing.

If mastering these three R's sounds like a tall order to you, why not come to us for help? If you have readiness and realism, we'll give you a hand with the necessary research—help you choose stocks to suit your circumstances, supply you with information about companies that interest you whenever you ask.

In fact, may we suggest a fourth R, which stands for Reputable Broker? We're at your service any time you say the word.

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